

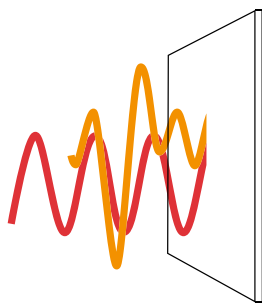
 **texdecor**
PANEL

AirPanel

1 face

$$\alpha_w = 1$$

$$\text{NRC} = 1$$



ACOUSTIC
PANEL





Single-sided AirPanel 600 x 600 mm, 1200 x 600 mm and 1200 x 1200 mm, fixation by rails

ACOUSTIC COMFORT

AirPanel has been designed to reduce reverberation phenomena by absorbing sound waves, thereby highly effectively improving a room's interior acoustic comfort. They are well suited to meet the acoustic needs of buildings under renovation as well as regulatory requirements for new buildings of the following types :

- Offices: open spaces, meeting rooms, call centres...
- Restaurants: hotels, corporate, schools...
- Functional rooms: music schools, libraries, show halls, amphitheatres...

Each type of space requires a specific acoustic treatment, depending on its intended use. This treatment provides several benefits:

- Facilitating discussion and concentration.
- Improving speech intelligibility and speech clarity.
- Reducing sound amplification and propagation phenomena resulting from reverberation.

Ceiling and wall AirPanels offer an efficient acoustic solution for the following situations :

- When the wall surface is insufficiently large to apply acoustic wallcovering.
- During renovations, they can easily be integrated into an existing setup.
- Correct efficiently the acoustics with individual panels placed in a room based on the location of the source of the sound and the required acoustic level target.

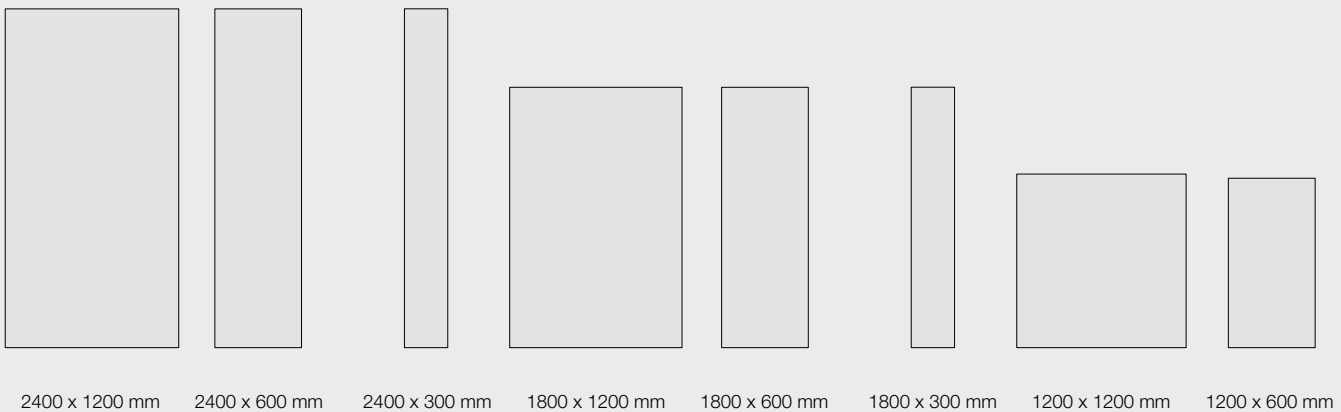


WALL
PANEL | AirPanel



AirPanel 1 face Hexagon 600 mm, fixation rail + magnets

15 SHAPES



AirPanel | CEILING PANEL



AirPanel 1 face ceiling tile 575 x 575 mm



1200 x 300 mm



600 x 600 mm



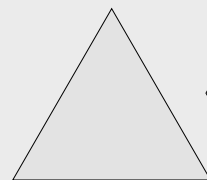
600 x 300 mm



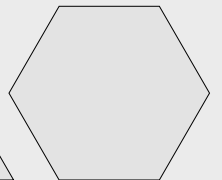
575 x 575 mm
Ceiling tile



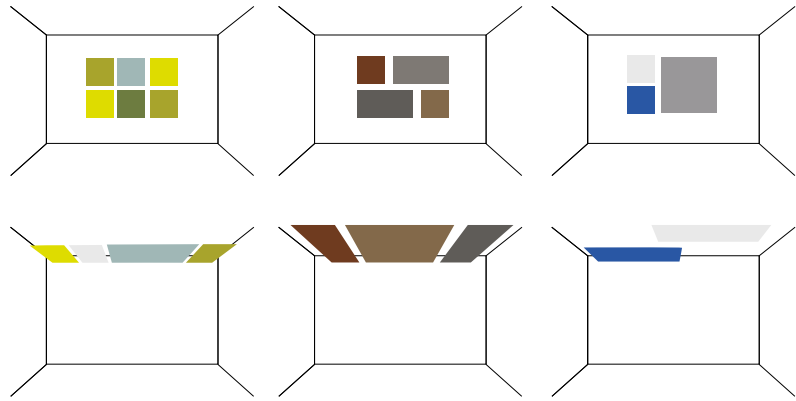
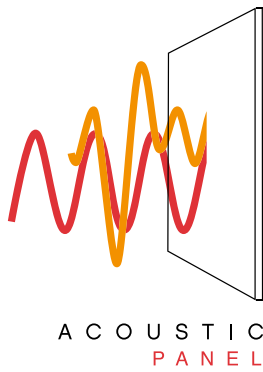
575 x 1175 mm
Ceiling tile



Triangle 1200 mm



Hexagon 1200 mm



ADVANTAGES

AirPanel acoustic panels are made of an open-cell absorbent and a metal frame covered with an anechoic fabric cover. Whether suspended from the ceiling or attached to the wall, these panels enhance a room and can be easily adapted to any type of architectural layout.

AESTHETICS :

15 shapes allowing a layout adapted to the architecture of the buildings.

AIRPANEL ensure a solution that is both aesthetic and technical, and can fit into any ceiling or wall configuration.

Multiple color and shape combinations allow you to create a functional ceiling or a unique wall decor : tone on tone, coloured mosaic pattern.

The brochure «Textile Twist AirPanel» presents the supply of textiles and colors available for the covers.

ACOUSTIC PERFORMANCE :

- NRC 1 = maximum acoustic performance
- Alpha w 1 = maximum acoustic performance

SIMPLE TO MOUNT :

- Wall fastening : metal rails or magnets
- Ceiling fastening : metal rails or sling cables

EASY CARE :

- The panel's fabric cover can be removed
- Washable polyester fabric

SAFETY AND ENVIRONMENT :

- Trevira CS / M1 fabric
- Oeketex / M1 absorbent



AirPanel 1 face 1200 x 600 mm, fixation by sling cables

ACOUSTIC

Acoustic comfort is when the sound message (words, music) reaches listeners in a perfect, unaltered state. A mix of absorbent and reflective surfaces is necessary to achieve maximum level of acoustic comfort.

One talk about acoustic correction when we change the absorption and reflection capacity of one or more walls, by changing their texture, surface, geometry and coating materials.

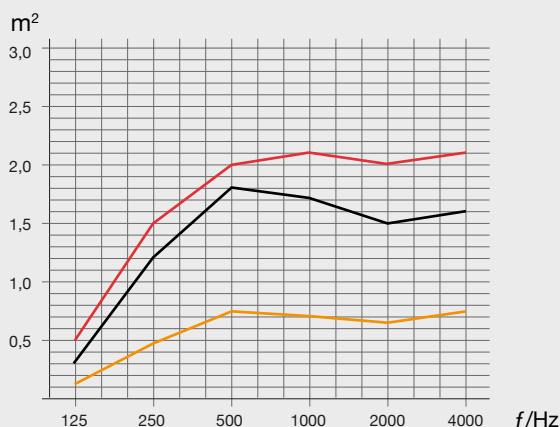


ACOUSTIC VALUES

Equivalent sound absorption area

- Square 1200x1200 mm, with 20cm plenum
- Square 1200x1200mm, without plenum
- Tile 575x575mmn with 20cm plenum

	alpha w	NRC
— Square 1200x1200 mm, with 20cm plenum	1	1
— Square 1200x1200mm, without plenum	1	1
— Tile 575x575mmn with 20cm plenum	1	1



Frequencies (Hz)	125	250	500	1000	2000	4000
Sound absorption area of square panel 1200x1200 with 20cm plenum (sqm)	0.5	1.5	2	2.1	2	2.1
Sound absorption area of square panel 1200x1200 without plenum (sqm)	0.3	1.2	1.8	1.7	1.5	1.86
Sound absorption area of tile square 575x575mm with 20cm plenum (sqm)	0.12	0.49	0.74	0.70	0.66	0.75

Equivalent sound absorption area: $A = \alpha w \times \text{panel surface}$
 Its average is calculated at the 500, 1000 and 2000 Hz bands.

Reverberation time (T_r) of a room having volume (V) is calculated using the Sabine formula: $T_r = 0.16 V/A$.

Shape types	Dimensions (in mm)	Average equivalent sound absorption area (sqm) at 20 cm	Average equivalent sound absorption area (sqm) without plenum
Square	1200 x 1200 x 50	2.03	1.66
Rectangle	1200 x 600 x 50	1.02	0.83
Square	600 x 600 x 50	0.50	0.42
Rectangle	2400 x 300 x 50	1.02	0.83
Rectangle	2400 x 600 x 50	2.03	1.66
Rectangle	2400 x 1200 x 50	4.06	3.32
Rectangle	1800 x 1200 x 50	3,04	2,49
Rectangle	1800 x 600 x 50	1.52	1.25
Rectangle	1800 x 300 x 50	0.76	0.62
Rectangle	1200 x 300 x 50	0.5	0.42
Rectangle	600 x 300 x 50	0.25	0.21
Triangle	1200 x 1200 x 1200 x 50	1.36	1.08
Hexagon	6 sides of 600 x 50	1.75	1.43
Tile	575 x 575 x 70	0.70	-
Tile	575 x 1175 x 70	1.40	-

FINISHING AND FITTING GUIDE



DESCRIPTION



12 shapes

CEILING FITTINGS



Sling cables
Metal colour



Option of cable :
white or black colour

WALL FITTINGS



Wall fitting on rail



Knurled screw screwed on the plate

METALLIC SURFACE



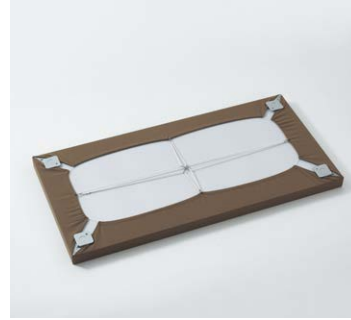
Magnetic wall fitting



Magnet screw on the plate



Hexagon 600mm side
Covered panel – rear view



Rectangle 1200 x 600 mm
Covered panel – rear view



Triangle 600 mm side
Covered panel – rear view



Finishing tip screws onto the twist clip



Knurled screw on the plate



Ceiling fittings on white rail



Knurled screw screwed on the plate



Rail fitted horizontally or vertically
according to constraints



Magnetic wall fitting



The magnet is housed in an opening to
provide maximum lateral hold



Magnet can be fitted on all types of
wall surface

CEILING PANEL



Metallic surface : cabinet, door,
structure...



After removing the initial tile, the AirPanel
tile is fully inserted in the ceiling



Final installation



AirPanel single sided, 1200mm side triangle and 1200mm hexagon, rails + magnet mountings



AirPanel single sided , 1800 x 600 mm, 600 x 600 mm, 300 x 1800 mm, magnet mounting

GUIDE OF CHOICE

1 Choose the format

1200

1200

2400 mm

1800 mm

1200 mm

1200

1200

1200

575

575

1175 mm

575

2400 mm

1800 mm

1200 mm

600

600

600

600

600 mm

600

2400 mm

1800 mm

1200 mm

300

300

300

300

600 mm

300

300

Ceiling tiles

575 mm

575

1175 mm

575

600 mm

600

600 mm

600


2 Choose the colour in the AirPanel textile brochures

...

3 Choose panel fixing method


WALL

RAIL



Colour

MAGNET



Colour


Fastening model

Vertically

Horizontally


CEILING

RAIL



Colour

CABLE



Colour

Ex : Ceiling panel with a Twist fabric cover, in blue colour and a square 1200 mm format suspended by white cables

AirPanel
CEILING
PANELS

1200 x 600 mm

texdecor

AirPanel
Twist
Fabric

Twist

White cables

Final product

View the entire offering of AirPanel acoustic panels / Acoustic 0.7 range



Double-sided acoustic panel



Lighting unit recess



Choice of fabrics and cover colours



AirPanel single sided, finition textile



AirPanel single sided 1200 x 1200 mm et 1200 x 300 mm, fixation rails



AirPanel single sided triangle 1200 mm, fixation x magnets

Find the whole technical documentation on www.texdecor.fr/en

TEXBROAMPV2GB

